

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1 –26 Cancelled.

27. (New) A composition for the oxidation dyeing of keratinous fibers comprising:

(a) at least one colorant chosen from oxidation bases and acid addition salts thereof;

(b) at least one coupler chosen from 2-amino-4-N-(β -hydroxyethyl)aminoanisole and acid addition salts of said coupler; and

(c) at least one enzyme of the laccase type.

28. (New) The composition according to Claim 27, wherein said keratinous fibers are human keratinous fibers.

29. (New) The composition according to Claim 28, wherein said human keratinous fibers are hair.

30. (New) The composition according to Claim 27, wherein said at least one enzyme of the laccase type is chosen from laccases of plant origin, laccases of animal origin, laccases of fungal origin, and laccases of bacterial origin; and laccases obtained by biotechnology.

31. (New) The composition according to Claim 27, wherein said at least one enzyme of the laccase type is of plant origin and is chosen from the laccases extracted from plants chosen from Anacardiaceae, Podocarpaceae, Rosmarinus off., Solanum tuberosum, Iris sp., Coffea sp., Daucus carota, Vinca minor, Persea americana,

Catharethus roseus, Musa sp., Malus pumila, Ginkgo biloba, Monotropa hypopithys
Aesculus sp., Acer pseudoplatanus, Prunus persica, and Pistacia palaestina.

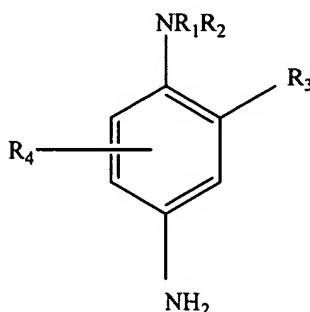
32. (New) The composition according to Claim 27, wherein said at least one enzyme of the laccase type is chosen from laccases of fungal origin and laccases obtained by biotechnology.

33. (New) The composition according to Claim 27, wherein said at least one enzyme of the laccase type is chosen from the laccases derived from fungi chosen from Polyporus versicolor, Rhizoctonia praticola, Rhus vemicifera, Scytalidium, Polyporus pinsitus, Myceliophthora thermophila, Rhizoctonia solani, Pyricularia orizae, Trametes versicolor, Fomes fomentarius, Chaetomium thermophile, Neurospora crassa, Colarius versicol, Botrytis cinerea, Rigidoporus lignosus, Phellinus noxius, Pleurotus ostreatus, Aspergillus nidulans, Podospora anserina, Agaricus bisporus, Ganoderma lucidum, Glomerella cingulata, Lactarius piperatus, Russula delica, Heterobasidion annosum, Thelephora terrestris, Cladosporium cladosporioides, Cerrena unicolor, Coriolus hirsutus, Ceriporiopsis subvermispora, Coprinus cinereus, Panaeolus papilionaceus, Panaeolus sphinctrinus, Schizophyllum commune, Dichomitius squalens, and variants of all said fungi.

34. (New) The composition according to Claim 27, wherein said at least one enzyme of the laccase type is present in a quantity ranging from 0.5 to 200 Lacu units per 100 g of said composition.

35. (New) The composition according to Claim 27, wherein said oxidation bases are chosen from para-phenylenediamines, double bases, para-aminophenols, ortho-aminophenols, heterocyclic oxidation bases, and their acid addition salts.

36. (New) The composition according to Claim 35, wherein said para-phenylenediamines are chosen from compounds of the following formula (I) and their acid addition salts:



in which:

- R_1 is chosen from hydrogen, C_1 - C_4 alkyl groups, monohydroxy(C_1 - C_4 alkyl) groups, polyhydroxy-(C_2 - C_4 alkyl) groups, (C_1 - C_4)alkoxy(C_1 - C_4)alkyl groups, C_1 - C_4 alkyl groups substituted with a nitrogen-containing group, phenyl groups, and 4'-aminophenyl groups;

- R_2 is chosen from hydrogen, C_1 - C_4 alkyl groups, monohydroxy(C_1 - C_4 alkyl) groups, polyhydroxy-(C_2 - C_4 alkyl) groups, (C_1 - C_4)alkoxy(C_1 - C_4)alkyl groups, and C_1 - C_4 alkyl groups substituted with a nitrogen-containing group;

- R_3 is chosen from hydrogen, halogens, C_1 - C_4 alkyl groups, monohydroxy (C_1 - C_4 alkyl) groups, hydroxy(C_1 - C_4 alkoxy) groups, acetlamino(C_1 - C_4 alkoxy) groups, mesylamino(C_1 - C_4 alkoxy) groups, and carbamoylamino (C_1 - C_4 alkoxy) groups;

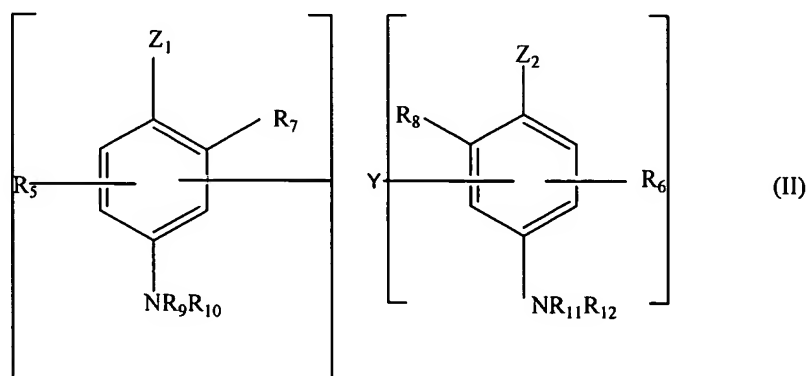
- R_4 is chosen from hydrogen, halogens, and C_1 - C_4 alkyl groups.

37. (New) The composition according to Claim 36, wherein when R_1 is a halogen, said halogen is chosen from chlorine, bromine, iodine and fluorine.

38. (New) The composition according to Claim 36, wherein said para-phenylenediamines of formula (I) are chosen from para-phenylenediamine, para-

tolylenediamine, 2-chloro-para-phenylenediamine, 2,3-dimethyl-para-phenylene-diamine, 2,6-dimethyl-para-phenylenediamine, 2,6-diethyl-para-phenylenediamine, 2,5-dimethyl-para-phenylenediamine, N,N-dimethyl-para-phenylenediamine, N,N-diethyl-para-phenylenediamine, N,N-dipropyl-para-phenylenediamine, 4-amino-N,N-diethyl-3-methylaniline, N,N-bis(β -hydroxyethyl)-para-phenylenediamine, 4-N,N-bis(β -hydroxyethyl) amino-2-methyl-aniline, 4-N,N-bis(β -hydroxyethyl)amino-2-chloroaniline, 2- β -hydroxyethyl-para-phenylenediamine, 2-fluoro-para-phenylenediamine, 2-isopropyl-para-phenylenediamine, N-(β -hydroxypropyl)-para-phenylenediamine, 2-hydroxymethyl-para-phenylene-diamine, N,N-dimethyl-3-methyl-para-phenylenediamine, N,N-(ethyl- β -hydroxyethyl)-para-phenylenediamine, N-(β,γ -dihydroxy propyl)-para-phenylene-diamine, N-(4'-aminophenyl)-para-phenylenediamine, N-phenyl-paraphenylenediamine, 2- β -hydroxyethyl oxypara-phenylenediamine, 2- β -acetylaminoethyloxy-para-phenylenediamine, N-(β -methoxyethyl)-para-phenylenediamine, and their acid addition salts.

39. (New) The composition according to Claim 35, wherein said double bases are chosen from compounds of the following formula (II), and their acid addition salts:



in which:

- Z_1 and Z_2 , which may be identical or different, are each chosen from hydroxyl groups and an $-NH_2$ group, each of which may be optionally substituted with a group chosen from C_1 - C_4 alkyl groups and a linking arm Y;

- the linking arm Y is chosen from linear and branched alkylene groups comprising from 1 to 14 carbon atoms, which optionally may be interrupted by, or which optionally may end with at least one nitrogen-containing group and/or at least one heteroatom, and which optionally may be substituted with at least one group chosen from hydroxyl groups and C_1 - C_6 -alkoxy groups;

- R_5 and R_6 , which may be identical or different, are each chosen from hydrogen, halogens, C_1 - C_4 alkyl groups, monohydroxy (C_1 - C_4 alkyl) groups, polyhydroxy- (C_2 - C_4 alkyl) groups, (C_1 - C_4 alkyl) groups, and a linking arm Y;

- R_7 , R_8 , R_9 , R_{10} , R_{11} , and R_{12} , which may be identical or different, are each chosen from hydrogen, a linking arm Y, and (C_1 - C_4 alkyl) groups;

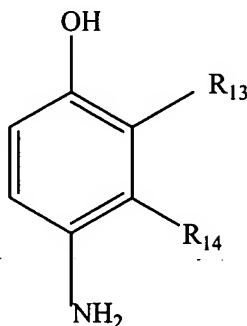
wherein the compounds of formula (II) contain only one linking arm Y per molecule.

40. (New) The composition according to Claim 39, wherein said at least one heteroatom of the linking arm Y is chosen from oxygen, sulfur, and nitrogen.

41. (New) The composition according to Claim 39, wherein said double bases of formula (II) are chosen from N,N'-bis(β -hydroxyethyl)-N,N'-bis(4'-amino-phenyl)-1,3-diaminopropanol, N,N'-bis(β -hydroxyethyl)-N,N'-bis (4'-aminophenyl) ethylenediamine, N,N'-bis(4-aminophenyl) tetramethylenediamine, N,N'-bis(β -hydroxyethyl)-N,N'-bis-(4-aminophenyl)tetramethylenediamine, N,N'-bis(4-methylamino-phenyl)-tetramethylenediamine, N,N'-bis(ethyl)-N,N'-

bis(4'-amino-3'-methylphenyl) ethylenediamine, 1,8-bis(2,5-diaminophenoxy)-3,5-dioxaoctane, and the acid addition salts of said double bases.

42. (New) The composition according to Claim 35, wherein said para-aminophenols are chosen from the compounds of formula (III), and their acid addition salts:



in which:

- R₁₃ is chosen from hydrogen, halogens, C₁-C₄ alkyl groups, monohydroxy(C₁-C₄ alkyl) groups, (C₁-C₄)alkoxy(C₁-C₄)-alkyl groups, amino(C₁-C₄ alkyl) groups, and hydroxy(C₁-C₄)alkylamino-(C₁-C₄ alkyl) groups;

- R₁₄ is chosen from hydrogen, halogens, C₁-C₄ alkyl groups, monohydroxy (C₁-C₄ alkyl) groups, polyhydroxy (C₂-C₄ alkyl) groups, amino(C₁-C₄ alkyl groups), cyano(C₁-C₄ alkyl) groups, and (C₁-C₄)alkoxy(C₁-C₄)alkyl groups;

wherein at least one of R₁₃ or R₁₄ is a hydrogen atom.

43. (New) The composition according to Claim 42, wherein said para-aminophenols of formula (III) are chosen from para-aminophenol, 4-amino-3-methylphenol, 4-amino-3-fluorophenol, 4-amino-3-hydroxymethylphenol, 4-amino-2-methylphenol, 4-amino-2-hydroxymethylphenol, 4-amino-2-methoxy methylphenol, 4-amino-2-amino-methylphenol, 4-amino-2-(β-hydroxy-ethylaminomethyl)phenol, 4-amino-2-fluoro-phenol, and their acid addition salts.

44. (New) The composition according to Claim 35, wherein said ortho-aminophenols are chosen from 2-aminophenol, 2-amino-5-methylphenol, 2-amino-6-methylphenol, 5-acetamido-2-aminophenol, and their acid addition salts.

45. (New) The composition according to Claim 35, wherein said heterocyclic oxidation bases are chosen from pyridine derivatives, pyrimidine derivatives, pyrazole derivatives, pyrazolopyrimidine derivatives, and their acid addition salts.

46. (New) The composition according to Claim 27, wherein said at least one colorant is present in a concentration ranging from about 0.0005% to about 12% by weight of the total weight of said composition.

47. (New) The composition according to Claim 27, wherein said at least one colorant is present in a concentration ranging from about 0.005% to about 6% by weight of the total weight of said composition.

48. (New) The composition according to Claim 27, wherein said at least one coupler is present in a concentration ranging from about 0.0001% to about 8% by weight of the total weight of said composition.

49. (New) The composition according to Claim 27, wherein said at least one coupler is present in a concentration ranging from about 0.005% to 5% by weight of the total weight of said composition.

50. (New) The composition according to Claim 27, further comprising at least one additional coupler different from 2-amino-4-N-(β -hydroxyethyl)aminoanisoole and/or at least one direct dye.

51. (New) The composition according to Claim 27, wherein said acid addition salts of said at least one oxidation base are chosen from hydrochlorides, hydrobromides, sulphates, tartrates, lactates, and acetates.

52. (New) The composition according to Claim 27, wherein said acid addition salts of said at least one coupler are chosen from hydrochlorides, hydrobromides, sulphates, tartrates, lactates, and acetates.

53. (New) The composition according to Claim 27, further comprising at least one carrier appropriate for dyeing keratinous fibers.

54. (New) The composition according to Claim 52, wherein said at least one carrier is chosen from water and organic solvents.

55. (New) The composition according to Claim 27, wherein said composition has a pH ranging from about 4 to about 11.

56. (New) A method of dyeing keratinous fibers, comprising the step of applying at least one dyeing composition to said keratinous fibers for a sufficient time to achieve a desired coloration, wherein said at least one dyeing composition comprises:

(a) at least one colorant chosen from oxidation bases and their acid addition salts;

(b) at least one coupler chosen from 2-amino-4-N-(β -hydroxyethyl)aminoanisoole and acid addition salts of said coupler; and

(c) at least one enzyme of the laccase type.

57. (New) A method for dyeing keratinous fibers comprising the steps of:

(a) storing a first composition;

(b) storing a second composition separately from said first composition;

(c) mixing said first composition with said second composition to form a mixture; and

(d) applying said mixture to said keratinous fibers for a sufficient time to achieve a desired coloration;

wherein said first composition comprises at least one colorant chosen from oxidation bases and their acid addition salts and at least one coupler chosen from 2-amino-4-N-(β -hydroxyethyl)aminoanisole and acid addition salts of said coupler in a medium appropriate for dyeing keratinous fibers, and

wherein said second composition (b) comprises at least one enzyme of the laccase type, in a medium suitable for dyeing keratinous fibers.

58. (New) A multicompartiment device or a dyeing kit, comprising:

a first compartment containing a first composition comprising at least one colorant chosen from oxidation bases and their acid addition salts and at least one coupler chosen from 2-amino-4-N-(β -hydroxyethyl)aminoanisole and acid addition salts of said coupler, in a medium appropriate for dyeing keratinous fibers; and

a second compartment containing a second composition comprising at least one enzyme of the laccase type, in a medium suitable for dyeing keratinous fibers.

59. (New) The composition according to Claim 27, wherein said at least one enzyme of the laccase type is chosen from laccases of fungal origin.

60. (New) The composition according to Claim 59, wherein said laccases of fungal origin are obtained by biotechnology.

61. (New) The composition according to Claim 27, wherein said at least one enzyme of the laccase type is chosen from laccases of plant origin, laccases of animal origin, laccases of fungal origin and laccases of bacterial origin.

62. (New) The composition according to Claim 27, wherein said at least one enzyme of the laccase type is chosen from laccases obtained by biotechnology.